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EXAMINER	
KENNEDY, ADRIAN L	

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2129	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/532,163	TAN ET AL.	
	Examiner	Art Unit	
	ADRIAN L. KENNEDY	2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Examiner's Detailed Office Action

1. This Office Action is responsive to **Amendment After Non Final**, filed **November 12, 2007**.

2. **Claims 1-38** will be examined.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6, 8-10, 13-18, 20-22, 25-32 and 34-36 rejected under 35 U.S.C. 103(a) as being unpatentable over He et al. (Machine Learning Methods for Chinese Web Page Categorization, referred to as He) in view of Kanaegami et al. (USPN 5,297,039, referred to as Kanaegami).

Regarding claims 1, 13 and 25:

He teaches,

> extracting from text documents semi-structured meta-data (He: Page(P) 94, Left Column (LC), ¶ 5), wherein the semi-structured meta-data includes a plurality of entities and a plurality of relations between the entities (He: P 94, LC, ¶ 3; Examiner's Note (EN): The examiner takes the position that the "words" taught in the invention of He, are equivalent to the key entities in the applicant's claimed invention. Additionally, the examiner takes

the position that in teaching the "words" being in "classes", He anticipates the "relations" of applicant's claimed invention.);

identifying (He: P 93, Right Column (RC), ¶ 1) from the semi-structured meta-data a plurality of key entities and a corresponding plurality of key relations (Page 94, Left Column, Paragraph 3; "*64,000 words in 1,006 classes*"; EN: The examiner takes the position that the "words" taught in the invention of He are equivalent to the key entities in the applicant's claimed invention. Additionally, the examiner takes the position that in teaching the "words" being in "classes", He anticipates the "relations" of applicant's claimed invention.);

deriving from a domain knowledge base (He: P 93, RC, ¶ 1) a plurality of attributes relating to each of the plurality of entities relating to one of the plurality of key entities for forming a plurality of pairs of key entity and a plurality of attributes related thereto (He: P 96, LC, ¶ 1);

analyzing the plurality of patterns using an associative discoverer (He: P 93, LC, ¶ 1; EN: The examiner takes the position that the associative map of He anticipates the applicant's claimed associative discoverer. This position this is supported by the applicant teaching in Paragraph 0045, that the "associative discover may embody a statistical method, a symbolical machine-learning algorithm, or a neural network model" and that the "neural network model may comprise, for example, an Adaptive Resonance Theory Map".); and

interpreting the output of the associative discoverer for discovering knowledge (He: P 96, LC, ¶ 2; EN: The examiner takes the position that "interpreting", as claimed by the applicant, is inherent in the process of learning and knowledge discovery in He.).

Regarding claims 13-24, the examiner takes the position that in teaching the use of his invention for processing input text data, He anticipates the use of program code which facilitates the execution of his method. Additionally, in teaching the downloading of the text data from web pages (He: P 93, RC, P 1), He anticipates the program code being computer readable.

Regarding claims 25-38, the examiner takes the position that in teaching methods which perform the functions of the applicant's claimed means, He anticipates the applicant's claimed means.

He does not teach the use of "pairs of key entities" and a "plurality of attributes attributed thereto".

However, Kanaegami teaches,

The use of pairs of key entities, and a plurality of attributes attributed thereto (Kanaegami: Column(C) 13, Lines(L) 3-6; EN: The examiner takes the position that the elements of the triplet anticipate the applicant's claimed "pairs of entities", and that the "attributes", as claimed by the applicant, are anticipated by the relation in the invention of Kanaegami.).

It would have been obvious to one skilled in the art at the time of invention to combine the text categorization system of He with the text matching system of Kanaegami for the purpose of text "*information extraction*" (Kanaegami: C 2, L 6-11).

Regarding claims 2, 14 and 28:

He teaches,

(Original) The method wherein the step of extracting from text documents comprises the step of extracting text content from documents containing at least one type of text, image, audio, and video information (He: P 94, LC, ¶ 94).

Regarding claims 3, 15 and 29:

He does not teach the method of claims 3, 15 and 29.

However, Kanaegami teaches,

(Currently Amended) The method wherein the step of identifying the plurality of key entities comprises the step of selecting the plurality of key entities according to frequency of appearance of the plurality of key entities in the semi-structured meta-data (Kanaegami: C 5, L 3-7; C 5, L 23-27; EN: The examiner takes the position that the "identifying", as claimed by the applicant, is anticipated by the searching in the invention of Kanaegami. Additionally, the examiner takes the position that the "selecting" as claimed by the applicant, is anticipated by the keyword extracting taught in the invention of Kanaegami.).

It would have been obvious to one skilled in the art at the time of invention to combine the text categorization system of He with the text matching system of Kanaegami for the purpose of text "*information extraction*" (Kanaegami: C 2, L 6-11).

Regarding claims 4, 16 and 30:

He does not teach the method of claims 4, 16 and 30.

However, Kanaegami teaches,

(Currently Amended) The method wherein the step of identifying the plurality of key relations comprises the step of selecting the plurality of key relations according to of frequency of appearance of the plurality of key relations in the semi-structured meta-data (Kanaegami: C 5, L 3-7; C 5, L 23-27; EN: The examiner takes the position that the "identifying", as claimed by the applicant, is anticipated by the searching in the invention of Kanaegami. Additionally, the examiner takes the position that the "selecting" as claimed by the applicant, is anticipated by the keyword extracting taught in the invention of Kanaegami.).

It would have been obvious to one skilled in the art at the time of invention to combine the text categorization system of He with the text matching system of Kanaegami for the purpose of text "*information extraction*" (Kanaegami: C 2, L 6-11).

Regarding claims 5, 17 and 31:

He teaches,

(Original) The method wherein the step of deriving from the domain knowledge base comprises the step of deriving from a domain knowledge base relating to at least one of taxonomy (He: P 94, LC, ¶ 2; EN: The examiner takes the position that a lexicon anticipates the applicant's claimed taxonomy.), a concept hierarchy network, ontology, a thesaurus, a relational database, and an object-oriented database.

Regarding claims 6, 18 and 32:

He does not teach the method of claims 4, 16 and 30.

However, Kanaegami teaches,

(Original) The method wherein the step of deriving the plurality of attribute comprises the step of deriving a set of attributes or lower level entities characterizing the plurality of entities relating to the plurality of key entities (Kanaegami: C 12, L 22-23; C 12, Lines 35-38; EN: The examiner takes the position that the parts of speech identified in said analysis networks during syntactical analysis, are attributes and/or lower level entities that characterize the analysis networks taught in the invention of Kanaegami.).

It would have been obvious to one skilled in the art at the time of invention to combine the text categorization system of He with the text matching system of Kanaegami for the purpose of text "*information extraction*" (Kanaegami: C 2, L 6-11).

Regarding claims 8, 20, 34:

He teaches,

(Original) The method wherein the step of analyzing the plurality of patterns using the associative discoverer comprises the step of analyzing the plurality of patterns using at least one of a neural network (He: P 95, RC, ¶ 3), a statistical system, and a symbolic machine learning system.

Regarding claims 9, 21 and 35:

He teaches,

(Original) The method wherein the step of analyzing the plurality of patterns comprises the step of analyzing the plurality of patterns using an Adaptive Resonance Associative Map (He: P 95, RC, ¶ 3).

Regarding claims 10 and 22:

He teaches,

(Original) The method wherein the step of interpreting the output of the associative discoverer for discovering knowledge comprises the step of discovering the relations between the plurality of attributes and the plurality of key entities (He: P 95, RC, ¶ 3; EN: The examiner takes the position that the "discovering [of] the relations" is inherent in the process of category recognition amongst patterns).

Regarding claim 26:

He teaches,

(Original) The system wherein the semi-structured meta-data comprises definition of entities and relations among the entities (He: P 94, LC, ¶ 3; EN: The examiner takes the position that the "words" taught in the invention of He et al., are equivalent to the key entities in the applicant's claimed invention. Additionally, the examiner takes the position that in teaching the "words" being in "classes", He et al. anticipates the "relations among the entities" of applicant's claimed invention.).

Regarding claim 27:

He teaches,

(Original) The system wherein the semi-structured meta-data is stored in a permanent or temporary storage (He: P 94, LC, ¶ 3; EN: The examiner takes the position that in teaching that the lexicon "contains" words, it is inherent that the words are stored in the lexicon, and that the lexicon is stored in some form that that can be accessed by segmentation model.).

Regarding claim 36:

He teaches,

(Original) The system according to claim 25 wherein the knowledge comprises hidden key relations between the attributes of the entities and the key entities (He: P 94, LC, ¶ 3; EN: The examiner takes the position that the "words" taught in the invention of He, are equivalent to the key entities in the applicant's claimed invention. Additionally, the examiner takes the position that in teaching the "words" being in "classes", He anticipates the "relations among the entities" of applicant's claimed invention. Finally, in broadly teaching relation between entities, He anticipates the specific claiming of "hidden relations".).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 7, 19 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al. (Machine Learning Methods for Chinese Web Page Categorization, referred to as He) in view of Kanaegami et al. (USPN 5,297,039, referred to as Kanaegami) and further in view of Tan et al. (Predictive Self-Organizing Networks for Text Categorization, referred to as Tan).

Regarding claim 7, 19 and 33:

Neither, He nor Kanaegami teach the use of "concatenated vector representation of the plurality of attributes".

However, Tan does teach,

The use concatenated vector representations of the plurality of attributes (Tan: P 69, Equation 6; EN: The examiner take the position that equation 6 anticipates that applicant's claimed "concatenated vector representation". This position is supported by the equation of Tan being substantially similar to the equation 1 taught in Paragraph 0064 of applicant's disclosure.) and the plurality of key entities relating to the corresponding plurality of key relations.

It would have been obvious to one skilled in the art at the time of invention to combine the text categorization system of He with the text knowledge discovery method of Tan for the purpose of the classification of text documents (Tan: P 66, ¶ 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 11, 12, 23, 24, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al. (Machine Learning Methods for Chinese Web Page Categorization, referred to as He) in view of Kanaegami et al. (USPN 5,297,039, referred to as Kanaegami) and further in view of Tan et al. (Learning User Profiles for Personalized Information Dissemination, referred to as Tan).

Regarding claims 11, 23 and 37:

Neither, He nor Kanaegami teach the use of a "user interface for displaying".

Tan teaches,

> (Original) The method further comprising the step of using a user interface for displaying the semi-structured meta-data, the plurality of key entities, the plurality of key relations, the plurality of attributes, and the knowledge discovered (Tan: P 187 LC, ¶ 5; EN: The examiner takes the position that in teaching the displaying of news from categories, Tan et al. anticipates the applicant's claimed "user interface for displaying").

It would have been obvious to one skilled in the art at the time of invention to combine the text categorization system of He with the text knowledge discovery method of Tan for the purpose of text feature extraction (Tan: P 186, RC, ¶ 2).

Regarding claims 12, 24 and 38:

Neither, He nor Kanaegami teach the use of a "user interface for obtaining user instruction".

Tan teaches,

(Original) The method further comprising the step of using a user interface for obtaining user instruction for the plurality of key entities and the plurality of key relations (Tan: P 187, LC, ¶ 5; EN: The examiner takes the position that in teaching the selection of news from categories, Tan anticipates the applicant's claimed "user interface for obtaining user instruction").

It would have been obvious to one skilled in the art at the time of invention to combine the text categorization system of He with the text knowledge discovery method of Tan for the purpose of text feature extraction (Tan: P 186, RC, ¶ 2).

Response to Arguments

Applicant's arguments filed on November 12, 2007 have been fully considered but are found to be non-persuasive. The unpersuasive arguments made by the Applicant are stated below:

Examiner's Opinion:

The examiner has considered the applicant's arguments in light of the claimed invention. Furthermore, the examiner respectfully reminds the applicant that "**during examination, the claims must be interpreted as broadly as their terms reasonably allow**". (MPEP 2111.01 [R-5] I)

In reference to Applicant's argument:

> Applicant respectfully reiterates that the inventions of claims 1, 13, and 25 comprises steps for transforming each of the key entities into a plurality of attributes through the use of an external domain knowledge base. Although Examiner is of the opinion that D1 discloses this feature (Page 96, Left Column, Paragraph 1), Applicant submits that D1 does not disclose the use of any knowledge base as D1 merely discloses that ARAM formulates recognition categories of input patterns.

Examiner's response:

The examiner has considered the applicant's argument and has found that in not further defining the applicant's claimed "domain knowledge base" in the claimed invention, the examiner has found that the claimed "domain knowledge base" reads on the domain knowledge taught by He (He: Page(P) 93, Right Column (RC), ¶ 1).

In reference to Applicant's argument:

> Hence, Applicant respectfully submits that since D1 and D2 each addresses different problem domains, it would not be obvious for a person having ordinary skills in the art to combine D1 and D2 to arrive at the method and system for discovering knowledge text documents of claims 1, 13 and 25.

Examiner's response:

The examiner has considered the applicant's argument and has found that in D1 teaching text categorization (He: P 93, RC, ¶ 1) and D2 teaching text matching (Kanaegami: C 1, L 7-17),

it would have been obvious to one of ordinary skill in the art at the time of invention to combine D1 with D2 for the purpose of information extraction (Kanaegami: C 2, L 6-11).

In reference to Applicant's argument:

> Applicant submits that D1 does not disclose the extraction of text content from documents, which contain at least one of text, image, audio and video information.

Examiner's response:

The examiner has considered the applicant's argument and has found that the applicant's claimed "extracting [of] text content from documents" in the claimed invention, the examiner has found that the claimed "extracting [of] text content from documents" reads on the extraction of suitable feature representations from documents during text categorization as taught by D1 (He: P 94, LC, ¶ 1).

In reference to Applicant's argument:

> Applicant submits D2 does not specifically disclose selecting the plurality of key entities based on the frequency of appearance in the semi-structure meta-data as described in each of claims 3, 15 and 29 of the present application.
>
> Applicant submits D2 does not specifically disclose selecting the plurality of key entities based on the frequency of appearance in the semi-structure met-data as described in each of claims 4, 16, and 30 of the present application.

Examiner's response:

The examiner has considered the applicant's argument and has found that the applicant's claimed "selecting of key entities" based on "frequency of appearance" in the claimed invention, that the applicant's claimed "selecting of key entities" based on "frequency of appearance" reads on the extraction of keywords using a search based on the occurrence of keywords as taught by

D2 (Kanaegami: C 5, L 3-7; C 5, L 23-27). In order to assist the applicant in furthering prosecution, the examiner has found that it would be beneficial for the applicant to further define the claimed "key entities" in the claimed invention, so as to not read on the teachings of D2.

In reference to Applicant's argument:

> Applicant submits that D2 makes no particular mention that the selection of verbs positioned after respective noun is specifically for characterizing the plurality of entities relating to the plurality of key entities as described in each of claims 6, 16 and 32 of the present application.

Examiner's response:

The examiner has considered the applicant's argument and has found that the applicant's argued "selection of verbs positioned after respective nouns" being used for "characterizing the plurality of entities relating to the plurality of key entities" is not a claimed limitation. Furthermore, in order to assist the applicant in furthering prosecution, the examiner has found that it would be beneficial for the applicant to further define the claimed "set of attributes" and "lower level entities characterizing the plurality of entities" in the claimed invention, so as to not read on the teaching of D2.

In reference to Applicant's argument:

> Hence, Applicant submits that D1 does not teach the use of a combination of a neural network, a statistical system and a symbolic machine learning system for analyzing the plurality of patterns.

Examiner's response:

The examiner has considered the applicant's argument and has found that the applicant's argued "combination of a neural network, a statistical system and a symbolic machine learning

system" is not a claimed limitation. Furthermore, the examiner respectfully takes the position that the applicant has mistakenly misinterpreted the claimed invention, which specifically claims the use of "**at least one of** a neural network, a statistical system, and a symbolic machine learning system" (Emphasis Added). Finally, the in having not further defined the applicant's claimed "neural network" in the claimed invention, the examiner has found that the applicant's claimed "neural network" reads on the neural networks taught by D1 (He: P 95, RC, ¶ 3).

In reference to Applicant's argument:

> Hence, Applicant submits that Examiner is applying hindsight in stating that discovering of the relations is inherent in the process of category recognition amongst patterns since there are no clear indications that this can easily be derived from the teachings of D1.

Examiner's response:

The examiner has considered the applicant's argument and has found that the applicant's claimed "discovering [of] relations" reads on the learning of categories as taught by D1 (He: P 95, RC, ¶ 3). This position is supported by the fact that it would have been obvious to one of ordinary skill in the art that the ARAM "learns relations" when learning categories, where the learning of categories consists of "learning relations" between input and output patterns.

In reference to Applicant's argument:

> Applicant submits that D1 does not specifically recite the definition of entities and relations among entities being in the semi-structured meta-data other than merely disclosing that the model contains 64,000 words in 1,006 classes.

Examiner's response:

The examiner has considered the applicant's argument and has found that in not further

defining the applicant's claimed "definition of entities and relations among the entities" in the claimed invention, that the applicant's claimed "definition of entities and relations among the entities" read on the words and words being in specific classes as taught by D1 (He: P 94, LC, ¶ 3). This position is supported by the fact that it would have been obvious to one of ordinary skill in the art that the relation betweens the words inherent in how the words are classified. Additionally, due to the broadness of the presently claimed "definitions of entities" and "relations among entities" is claimed, the examiner has interpreted the "definitions" to include both implicit and explicit "definitions" and the "relations" to include both implicit and explicit "relations". This interpretation is based on the fact that no specific limitation is stated in the claimed invention.

In reference to Applicant's argument:

> Applicant agrees with Examiner that lexicon disclosed by D1 has to be stored in some form but D1 makes no specific mention that the lexicon is stored either in a permanent or temporary storage.

Examiner's response:

The examiner has considered the applicant's argument and has found that while D1 does not specifically recite the storing of his lexicon in either permanent or temporary storage, the examiner asserts that it would have been obvious to one of ordinary skill in the art to store the lexicon in a form that is accessible by the segmentation model (He: P 94, LC, ¶ 3), and in claiming all possible ways of storing information (i.e. temporary or permanently) the examiner has found that the applicant's broad claiming reads on the broad teaching of D1.

In reference to Applicant's argument:

> Applicant submits that D1 makes no specific mention of hidden key relations between the attributes of the entities and the key entities.

Examiner's response:

The examiner has considered the applicant's argument and has found that in not further defining the applicant's claimed "hidden key relations" in the claimed invention, that the applicant's claimed "hidden key relations" read on the teaching of words being in classes wherein the classes inherently contain "hidden key relations" as taught by D1 (He: P 94, LC, ¶ 3). Furthermore, in not specifically claiming whether the "hidden key relations" are implicit or explicit, the examiner has interpreted the "hidden key relations" to be implicit and/or explicit. Finally, in order to assist the applicant in furthering prosecution, the examiner has found that it would be beneficial for the applicant to specifically claim what is meant by the phrase "hidden key relations" as stated in the claimed invention.

In reference to Applicant's argument:

> Applicant submits that D1 makes no specific mention of hidden key relations between the attributes of the entities and the key entities.

Examiner's response:

The examiner has considered the applicant's argument and has found that in not further defining the applicant's claimed "hidden key relations" in the claimed invention, that the applicant's claimed "hidden key relations" read on the teaching of words being in classes wherein the classes inherently contain "hidden key relations" as taught by D1 (He: P 94, LC, ¶ 3). Furthermore, in not specifically claiming whether the "hidden key relations" are implicit or

explicit, the examiner has interpreted the "hidden key relations" to be implicit and/or explicit. Finally, in order to assist the applicant in furthering prosecution, the examiner has found that it would be beneficial for the applicant to specifically claim what is meant by the phrase "hidden key relations" as stated in the claimed invention.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Claims 1-38 are rejected.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adrian L. Kennedy whose telephone number is (571) 270-1505. The

examiner can normally be reached on Mon -Fri 8:30am-5pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALK

David Vincent
Supervisory Patent Examiner
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/Joseph P. Hirl/

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